

REMARKS

In the Office Action, the Examiner rejected claims 48-77. By the present Response, Applicants amend claims 51, 61, 68, and 71 to correct certain informalities. Upon entry of the amendments, claims 48-77 will remain pending in the present patent application. Applicants respectfully request reconsideration of the above-referenced application in view of the following remarks.

Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 48, 49, 52, 58, 62, and 72 under 35 U.S.C. § 102(b) as anticipated by Cook, II (U.S. Patent No. 5,687,066). Applicants respectfully traverse this rejection.

Legal Precedent

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Moreover, the prior art reference also must show the *identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

Omitted Features of Independent Claims 48 and 58

Turning now to the present claims, the Cook reference fails to disclose each element of independent claims 48 and 58. For instance, independent claims 48 and 58 each recite a converter having “*a support including a passage* for circulation of a cooling medium” (emphasis added). Independent claim 58 also recites “at least one plug-in

connector coupled to the switching circuit and to the housing for ... extending EMI shielding from the housing to a region at least partially surrounding conductors of the at least one connector.” Applicants further note that dependent claim 49 includes a similar recitation. Because the Cook reference fails to disclose such elements, the cited reference fails to anticipate independent claims 48 and 58.

As will be appreciated, the Cook reference is generally directed to a power converter for providing DC power to a recreational vehicle. Col. 1, lines 13-16. The Cook converter 10 includes a switched power converter circuit 20 mounted on a circuit board 22. Col. 4, lines 47-50; FIG. 2. The circuit board 22 is disposed within a housing 18, which includes certain cooling features for dissipating heat from the converter, such as apertures 48 and cooling fins 50, and mounting feet 60 and 62 to facilitate mounting of the converter 10 to a recreational vehicle. Col. 4, line 47 – col. 5, line 11; col. 5, lines 23-28; FIGS. 2 and 3. The converter 10 further includes a fan housing 52 and associated fan 54 that forces cooling air across components of circuit 20 inside the housing 18. Col. 5, lines 12-15; FIGS. 3 and 5. The air moved by fan 54 exits housing 18 through the apertures 48 provided in the housing. Col. 5, lines 15-16. The converter 10 also includes an output block 16 that contains DC outputs 32 and 34 of converter circuit 20. Col. 5, lines 3-5; FIGS. 2 and 3.

After carefully reviewing the present Office Action, Applicants respectfully submit that the Examiner has either misread or misunderstood the recitations of the instant claims. Particularly, independent claims 48 and 58 clearly recite “a support including a passage for circulation of a cooling medium.” In the Office Action, the Examiner equates mounting feet 60 and 62 as such a support, and suggests that apertures 48 are comparable to the recited cooling passage of the support. *See* Office Action mailed November 25, 2005, page 2. Because apertures 48 are formed in a wall of housing 18, and are not formed in the mounting feet 60 and 62, it is readily apparent that the mounting feet 60 and 62 do not include the apertures 48 and, thus, that the mounting

feet 60 and 62 cannot be reasonably considered to be “a support including a passage for circulation of a cooling medium” as recited by the instant claims. For at least this reason, Applicants respectfully submit that the Cook reference fails to disclose each and every element of independent claims 48 and 58. Consequently, the Cook reference fails to anticipate independent claims 48 and 58, or their respective dependent claims, including claims 49, 52, and 62.

In the interest of advancing prosecution, Applicants respectfully submit that the Examiner appears to have read the claims erroneously, resulting in the misinterpretation evidenced in the present Office Action. More particularly, Applicants believe that the Examiner mistakenly read this element as a converter “including a support *and* including a passage” (emphasis used to indicate an improper addition to the claim), and that this mistake lead to the improper rejection of independent claims 48 and 58. Such a construction is contrary to standard rules of grammar, as it improperly disassociates the adjective clause “including a passage” with the proximate noun it modifies, i.e. “support.” Because the actual recitation of these claims is “a support including a passage,” and because “including a passage” modifies the proximate noun “support,” any potentially anticipating reference must, among other things, at least provide a *support* that includes a cooling passage. As noted above, the Cook reference fails to teach any such support. Applicants fully believe that the Examiner will, upon reconsideration, recognize that such an error is present in the current Office Action. Of course, if the Examiner would like to discuss the proper construction of the present claims or has any other remaining concerns, the Examiner is kindly invited to contact the undersigned representative to discuss these issues.

Additionally, with respect to independent claim 58 and dependent claim 49, Applicants respectfully submit that the Cook reference fails to teach “at least one plug-in connector coupled to the switching circuit and to the housing for ... extending EMI shielding from the housing to a region at least partially surrounding conductors of the at

least one connector.” In the Office Action, the Examiner equated the DC outputs 32 and 34 of the Cook converter with the recited “at least one plug-in connector ... extending EMI shielding from the housing to a region at least partially surrounding conductors of the at least one connector.” See Office Action mailed November 25, 2005, page 2 (with reference only to claim 49). Applicants respectfully note that DC outputs 32 and 34 are, in fact, the output conductors of the Cook converter and are not capable of extending EMI shielding to a region surrounding themselves. Again, in the interest of advancing prosecution, Applicants recognize that the Examiner may have intended to equate the DC outputs 32 and 34 with the recited conductors, and to equate the output block 16 to the recited connector. However, after review, it appears that the Cook reference fails to suggest that output block 16 is even capable of providing EMI shielding. In fact, the reference appears to be entirely silent with respect to electromagnetic interference proximate the DC outputs 32 and 34. For these reasons, Applicants respectfully submit that the Cook reference also fails to disclose any structure that can be reasonably compared to at least one plug-in connector coupled to the switching circuit and to the housing for ... extending EMI shielding from the housing to a region at least partially surrounding conductors of the at least one connector,” as recited by claims 49 and 58. Accordingly, claims 49 and 58 cannot be anticipated by the Cook reference.

Deficiency of the Rejection of Claim 72

Applicants respectfully note that claim 72 depends from independent claim 68. The Examiner has acknowledged that the Cook reference fails to disclose each and every element recited in independent claim 68. See Office Action mailed November 25, 2005, page 6. Because a dependent claim includes the elements provided in the claim from which it depends, the Cook reference also necessarily fails to disclose each and every element of dependent claim 72 and, consequently, cannot anticipate this claim. As discussed in detail below, independent claim 68 is believed allowable over the art of record. Applicant respectfully submits that dependent claim 72 is also allowable over the

art of record based on its dependency from independent claim 68, as well as for the subject matter separately recited in this dependent claim.

For at least these reasons, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 102 and allowance of claims 48, 49, 52, 58, 62, and 72.

Rejections Under 35 U.S.C. § 103

In the Office Action, the Examiner appears to have rejected claims 50, 51, 53-57, 59-61, 63-71, and 73-77 under 35 U.S.C. § 103 based on the Cook reference in view of Nigorikawa (U.S. Patent No. 4,628,412) or Sanger et al. (U.S. Patent No. 6,016,007), alternatively. Particularly, the Examiner summarized these rejections by stating that claims “50, 53-55, 59, 60, 63-65, 68-70, [and] 73-75 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cook, II (US 5,687,006) in view of Nigorikawa (US 4,628,412) and Sanger et al. (US 6,016,007).” Office Action mailed November 25, 2005, page 3. However, after careful review of the rejections, this summary appears to be incorrect as well as incomplete. In order to advance prosecution of this case, Applicants are presently assuming that the summary is simply in error to the extent it conflicts with the more detailed rejections following this summary. *See id.* at pages 3-6. In other words, Applicants presently believe that the Examiner has actually rejected claim 68 under 35 U.S.C. § 103 as unpatentable over the Cook reference; rejected claims 50, 53-55, 59, 60, 63-65, 68-70, and 73-75 under 35 U.S.C. § 103 as unpatentable over the Cook reference in view of the Nigorikawa reference; and rejected claims 51, 56, 57, 61, 66, 67, 71, 76, and 77 under 35 U.S.C. § 103 as unpatentable over the Cook reference in view of the Sanger et al. reference. If these are not the rejections the Examiner intended, Applicants respectfully request that the Examiner clarify his intended rejections in a future, non-final Office Action in order to allow Applicants a fair and reasonable chance to respond to the Examiner’s intended rejections. To the extent that Applicants’ summary of the rejections under 35 U.S.C. § 103 is correct, Applicants respectfully traverse these rejections.

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

Omitted Features of Independent Claim 68

Applicants respectfully note that the Cook reference fails to disclose each element of independent claim 68. For instance, independent claim 68 recites a converter having “a *support including* a passage for circulation of a cooling medium” (emphasis added). Further, claim 68 also recites at least one plug-in connector and a connector plug, “wherein the at least one plug-in connector and the connector plug mate to extend EMI shielding from the housing to the connector plug.” Because the cited reference fails to disclose such elements, the Cook reference cannot support a *prima facie* case of obviousness with respect to independent claim 68.

In the Office Action, the Examiner stated that the Cook reference “discloses all elements of the converter as described above with respect to claim 1 [*sic*] except, Cook, II

does not disclose connector plug adapted to interface with the at least one plug-in connector” See Office Action mailed November 25, 2005, page 6. For the present purposes, Applicants assume that the Examiner intended to draw comparison with the rejection of independent claim 48, as claim 1 is not pending in this application. As discussed above with respect to independent claim 48, the Cook reference fails to disclose either “a support including a passage for circulation of a cooling medium,” or a plug-in connector that extends EMI shielding from the housing to a region about conductors of the plug-in connector. With respect to the latter element, while the Examiner asserts that it would be obvious to make a connector plug adapted to interface with the recited connector, this assertion, even if correct, does not result in a teaching that “the at least one plug-in connector and the connector plug mate *to extend EMI shielding from the housing to the connector plug*,” (emphasis added) as recited by independent claim 68. Further, the Examiner’s assertion with respect to adding a connector plug clearly does not obviate the failure of the Cook reference to disclose “a support including a passage for circulation of a cooling medium,” as also recited in independent claim 68. Because the proposed modification of the reference could not possibly include each and every element of the present claim, the Cook reference and proposed modification fail to establish a *prima facie* case of obviousness with respect to independent claim 68.

Deficiencies of the Rejections of the Dependent Claims

Applicants note that each of claims 50, 51, 53-57, 59-61, 63-67, 69-71, and 73-77 depends from one of independent claims 48, 58, and 68. As discussed above, the Cook reference fails to disclose each element of independent claims 48 and 58, and the proposed modification of the Cook reference discussed immediately above fails to disclose each element of independent claim 68. Further, the Nigorikawa and Sanger et al. references fail to obviate the deficiencies of the Cook reference. As a result, dependent claims 50, 51, 53-57, 59-61, 63-67, 69-71, and 73-77 are believed allowable on the basis of their dependency from a respective allowable independent claim, as well as for the subject matter separately recited in these dependent claims.

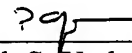
For at least these reasons, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103 and allowance of claims 50, 51, 53-57, 59-61, 63-71, and 73-77.

Conclusion

In view of the remarks set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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